

Title: *Big Data*

Code: CIS*6650*04

Instructor: Dr. Rozita Dara

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Contact:

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Class Location: MCKN, Room 312

Date: Wed and Fri, 1-2:20PM

Description: Recent advances in big data technologies has brought us to a unique time in human history. The impact of such technologies is now evident in our economy, civil liberties, food production, healthcare, education, and many other aspects of our society. The goal of CIS*6650-Big Data course is to equip students with technical and intellectual skills to tackle emerging challenges and opportunities of Big Data.

This course provides an overview of big data technologies and their implications. It covers big data principles, the state-of-the-art methodologies for large data management and analysis, and their applications to real-world problems. To this end, it briefly reviews data mining techniques such as data cleaning, data analysis algorithms, and approaches such as predictive, perspective, and descriptive. The course also focuses on Big Data management and analytics techniques and provides hands on experience with tools such as Hadoop, Spark, Map Reduce or other tools.

Furthermore, this course reviews Big Data emerging applications such as social computing, smart cities, smart cars, military, and many more. Lastly, Big Data technologies implications will be extensively discussed in the class.

Recommended Textbooks:

- Reading materials will be provided in the class.

Course Webpage:

<https://courselink.uoguelph.ca/d2l/home/476474>

Course work and evaluation

Course Work	Weight	Timeline
Assignment 1	15%	Oct 8, at 11:30pm
Assignment 2	15%	Oct 29 at 11:30pm
Presentation 1	10%	Week of Sep 25
Presentation 2	10%	Week of Nov 13 and/or Nov 27
Project Proposal	5%	Oct 1, at 11:30pm
Project - Preliminary results	15%	Nov 12, at 11:30pm

Project – final paper	30%	Dec 3, at 11:30pm
Assignments should be submitted through courselink.		

E-mail Communication

As per university regulations, all students are required to check their <mail.uoguelph.ca.> e-mail account regularly: e-mail is the official route of communication between the University and its students.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the graduate calendar for information on regulations and procedures for Academic Consideration:

<https://www.uoguelph.ca/registrar/calendars/graduate/2017-2018/pdffiles/calendar.pdf>

Drop Date

The last date to drop one-semester courses, without academic penalty, is the 40th day of classes. For regulations and procedures for Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/graduate/current/pdffiles/sched.pdf>

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Students Accessibility Service as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: <http://www.uoguelph.ca/csd/>

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students

need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Graduate Calendar:

<https://www.uoguelph.ca/registrar/calendars/graduate/2017-2018/pdf/files/calendar.pdf>

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded in any electronic media without the permission of the presenter, whether the instructor, a classmate or guest lecturer.

Resources

The Graduate Calendar is the source of information about the University of Guelph's procedures, policies and regulations which apply to graduate programs:

<http://www.uoguelph.ca/registrar/calendars/graduate/current/>